

IN THE CLAIMS

The pending claims are as follows:

1. (Original) Method of signal reconstruction comprising a dynamic range control processing of an input signal of an image to generate an output signal of the image, the method comprising the steps of:

- 5 - providing the input signal;
- determining an amount by:
 - specifying an input range of the input signal, and
 - specifying an output range of the output signal,
- selecting a convex function as a non-linear transfer
- 10 characteristic capable of compressing the input signal according to the amount of dynamic range control processing;
- processing the input signal wherein the input signal is transferred by means of the convex function;
- generating the output signal as a result of the
- 15 processing.

2. (Original) The method according to claim 1, characterized in that at least a peak value and/or an exposure average value taken from the signal is used to determine the input range and/or the output range, in particular taken by measurement and/or histogram

5 analysis of the signal, in particular taken from a luminance signal.

3. (Previously Presented) The method according to claim 1, characterized in that the input signal is compressed if a peak value of the input signal exceeds the output range.

4. (Previously Presented) The method as claimed in claim 1, characterized in that the input signal is compressed with regard to a mere fraction of the image.

5. (Previously Presented) The method as claimed in claim 1, characterized in that the convex function is selected depending on the input range and/or the output range.

6. (Previously Presented) The method as claimed in claim 1, characterized in that the convex function is formed by at least a first and a second part having a kneepoint as a point of intersection of the first and the second part wherein the first
5 part of the convex function has an average steepness exceeding the average steepness of the second part.

7. (Original) The method as claimed in claim 6, characterized in that the kneepoint is located on the convex function at a specified kneelevel separating the first part and the second part.

8. (Previously Presented) The method as claimed in claim 6, characterized in that each of the first and the second part of the

convex function is formed by a linear function having a constant steepness.

9. (Previously Presented) The method as claimed in claim 6, characterized in that the convex function is selected by varying the steepness of the second part, in particular by simultaneously keeping the kneelevel constant.

10. (Previously Presented) The method as claimed in claim 6, characterized in that the convex function is selected by varying the kneelevel of the convex function, in particular by simultaneously keeping the steepness of the second part constant.

11. (Previously Presented) The method as claimed in claim 6, characterized in that the convex function is selected depending on the input and/or the output range, wherein a combination of varying the steepness and varying the kneelevel is available.

12. (Previously Presented) The method as claimed in claim 6, characterized in that varying the steepness of the second part is selected if the input range of the input signal exceeds a pre-determined threshold level.

13. (Previously Presented) The method as claimed in claim 1, characterized in that the image signal comprises a number of

components, in particular a luminance component and/or one or more color components.

14. (Original) The method as claimed in claim 13, characterized in that the image signal is formed by a Y-UV-signal or an RGB-signal.

15. (Previously Presented) The method as claimed in claim 1, characterized in that the amount of dynamic range control processing is determined on a Y-signal, in particular a Y-signal derived from an R-, G- and B-component or determined on at least
5 one component of an R-, G- or B-component.

16. (Previously Presented) The method as claimed in claim 1, characterized in that the input signal is a digital signal.

17. (Original) The method as claimed in claim 16, characterized in that the digital signal is received from a white signal balancing module and, in particular, the output signal is applied to a gamma-control module.

18. (Previously Presented) The method as claimed in claim 16, characterized in that an amount of compression range is commonly applied to all components of the image signal for dynamic range control processing and/or the components are processed by means of
5 a convex function common to all components of the image signal.

19. (Previously Presented) The method as claimed in claim 1, characterized in that the input signal is an analog signal.

20. (Previously Presented) The method as claimed in claim 1, characterized in that the input signal is received from a sensor, in particular a sensor matrix and, in particular, the output signal is applied to an analog digital converter.

21. (Previously Presented) The method as claimed in claim 1, characterized in that at least one of the components of the image signal is processed by transferring the at least one component by means of a specific convex function according to a pre-determined
5 amount of dynamic range control processing, which has been determined specifically for the at least one component.

22. (Previously Presented) The method as claimed in claim 1, characterized in that the steepness, and/or the kneelevel and/or the input range is determined from a specific signal component, in particular a luminance signal, and is selected for all signal
5 components.

23. (Previously Presented) The method as claimed in claim 1, characterized in that the steepness, and/or the kneelevel and/or the input range is selected according to a sensor matrix and/or a

temperature value of the image for each component of the signal, in
5 particular for a color component.

24. (Previously Presented) The method as claimed in claim 1,
characterized in that the input range and/or the output range is
determined from a digital signal.

25. (Previously Presented) The method as claimed in 4claim 1,
characterized in that an exposure measurement is provided in a loop
in parallel with the dynamic range control processing.

26. (Previously Presented) The method as claimed in claim 1,
characterized in that a white balance control is provided in a loop
in parallel with the dynamic range control processing.

27. (Previously Presented) The method as claimed in claim 25,
characterized in that original data of the input signal are
retrieved and the original data are provided to an exposure
measurement and a white balance control.

28. (Original) The method as claimed in claim 27, characterized
in that the original data of the input signal are retrieved by
means of an inverse non-linear transfer characteristic.

29. (Previously Presented) The method as claimed in claim 27,
characterized in that the exposure measurement is controlled to

assign the maximum output signal amplitude to a peak value of white.

30. (Original) Imaging device for signal reconstruction comprising a means for dynamic range control processing of an input image signal to generate an output image signal, the image device comprising:

- 5 - an input means for providing an input signal;
- a means for determining an amount comprising:
 - a means for specifying an input range of the input signal, and
 - a means for specifying an output range of the output
- 10 signal;
- a computing means for selecting a convex function as a non-linear transfer characteristic capable of compressing the input signal according to the amount of dynamic range control processing;
- a processing means for transferring the input signal by
- 15 means of the convex function;
- an output means for generating the output signal from the signal received by the processing means.

31. (Previously Presented) Computer program product storable on a medium readable by a computer system, comprising a software code section, which induces the computer system to execute the method as claimed in claim 1 when the product is executed on the computer

5 system.

32. (Original) The computer program product as claimed in claim
31 comprising a module for calculation of a dynamic look-up table
for selection of a convex function as a non-linear transfer
characteristic depending on at least one of the parameters selected
5 from the group consisting of: peak value, exposure average value,
input range, output range and temperature value.

33. (Previously Presented) The computer program product as claimed
in claim 31, characterized by a module for calculating an inverse
dynamic look-up table as an inverse non-linear transfer
characteristic.

34. (Previously Presented) The computer program product as claimed
in claim 31, characterized by a module for calculating a dynamic
look-up table and/or an inverse dynamic look-up table if the input
signal is an analog signal and which is specifically adapted for at
5 least one component of the input signal.